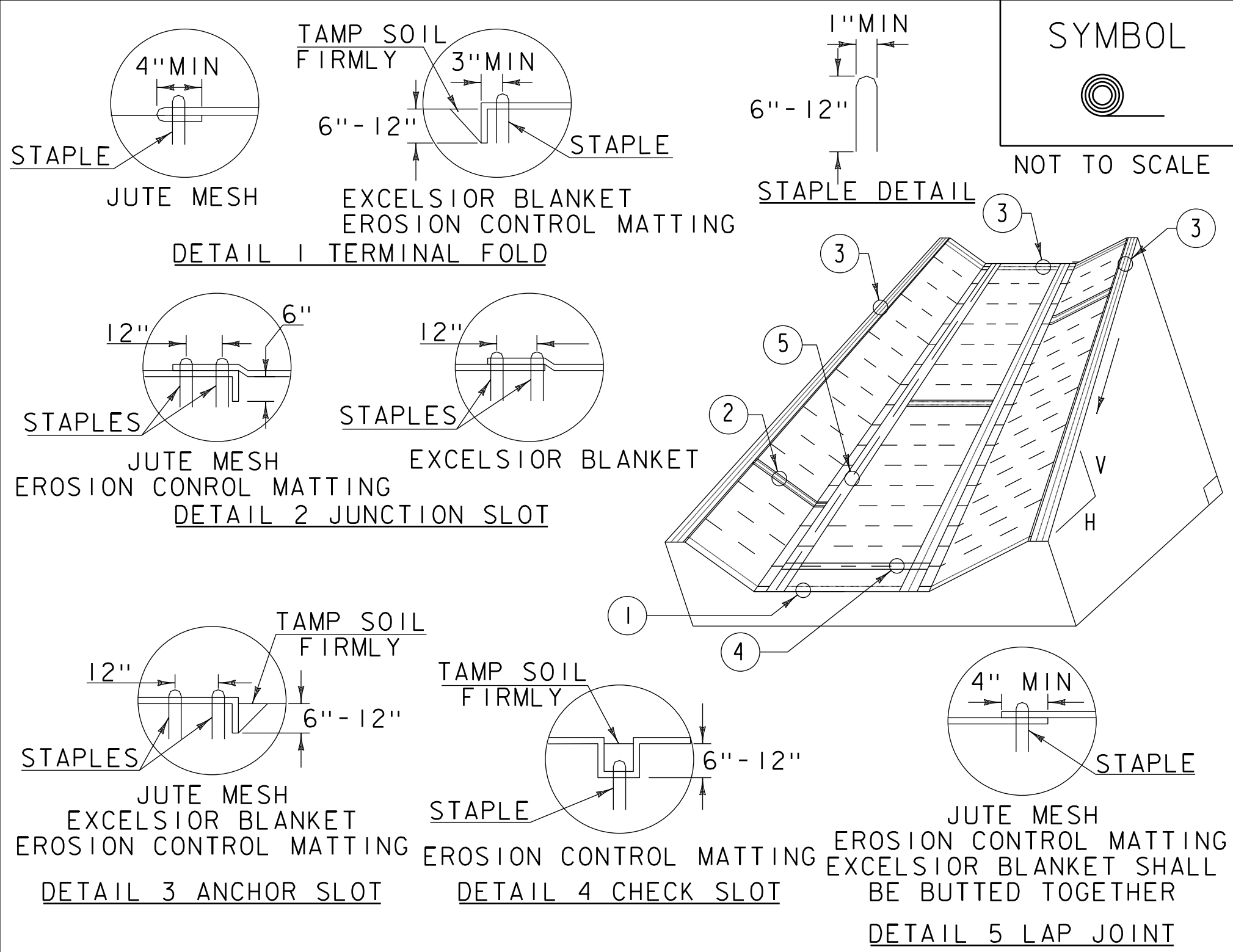


BRIDGE 52 EROSION CONTROL PLAN 2
SCALE 1" = 20'-0"

REV. NO.	DATE:

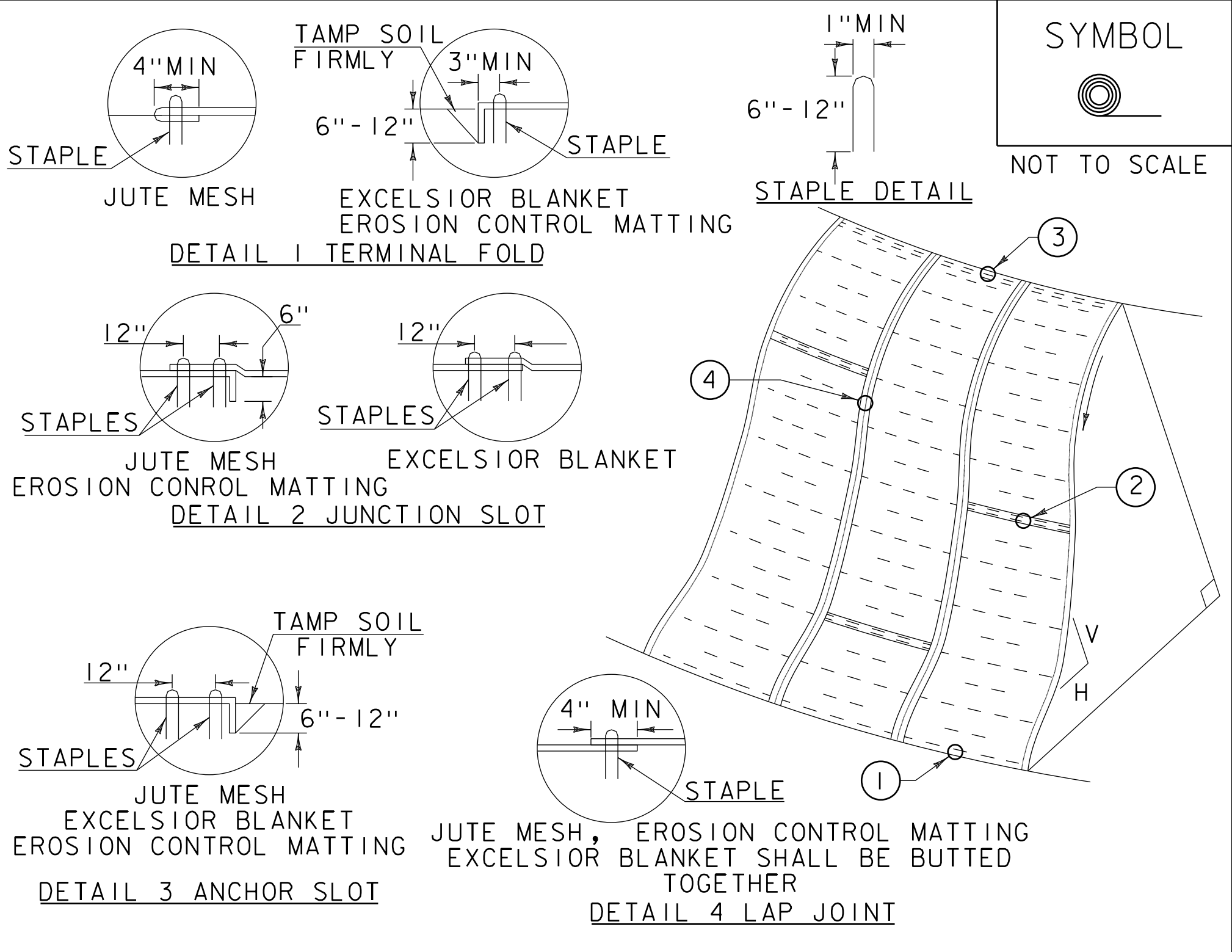
RENAUD BROS. INC.
285 FT. BRIDGEMAN RD. VERNON VT., 05554
PH. (802) 251-7585 FAX (802) 251-7508

SHEET NAME: BRIDGE 52 EROSION CONTROL PLAN		
PROJECT NAME: WINHALL		SHEET NO. 3 OF 8
PROJECT NO: STP CULV (31)		
DRAWN BY: CE	CHK'D BY:	DATE: 04/16/2015



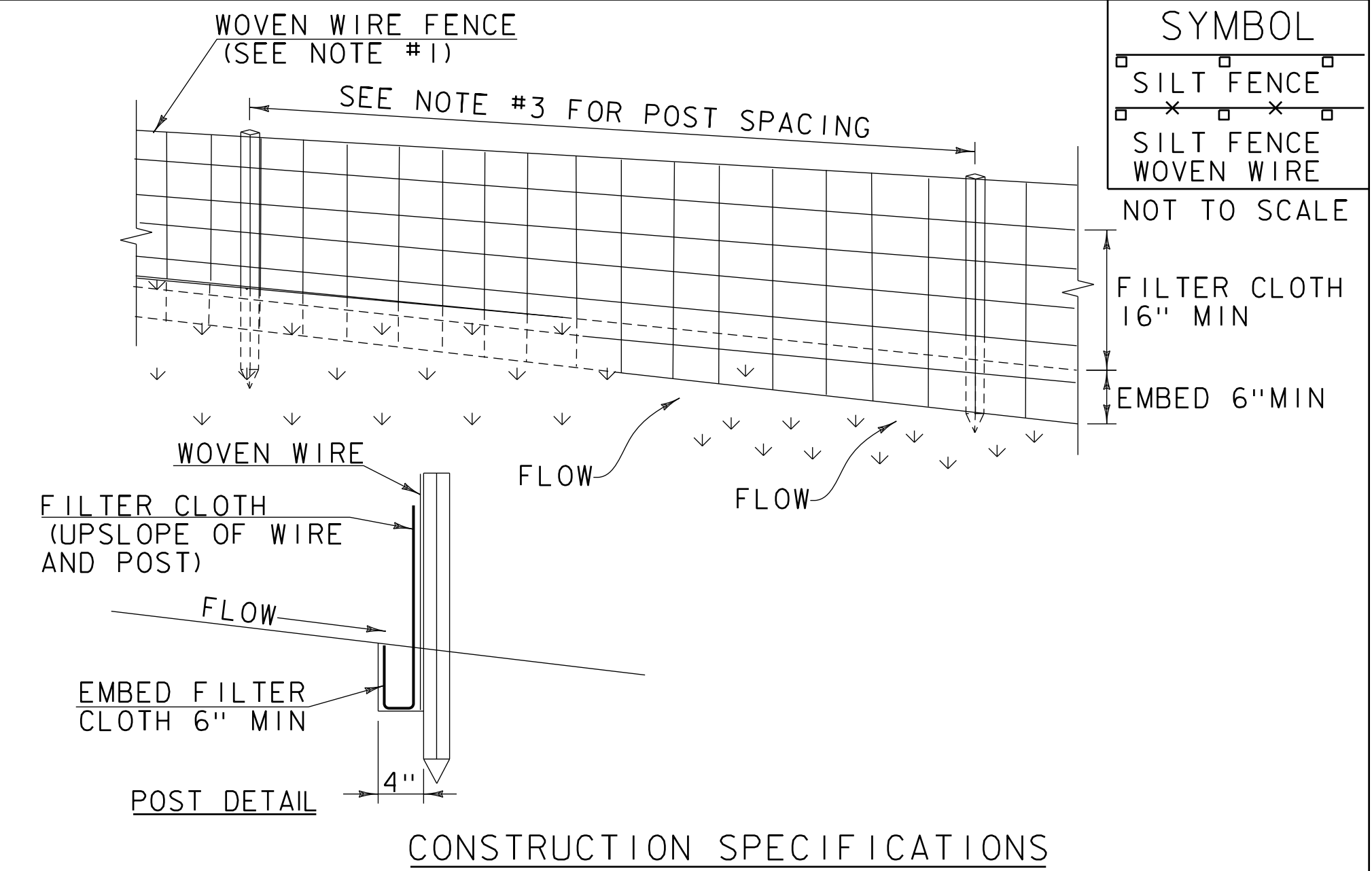
- CONSTRUCTION SPECIFICATIONS**
1. EROSION MATTING, CHECK SLOTS, SHALL BE SPACED IN DITCH CHANNEL SO THAT ONE OCCURS WITHIN EACH 50' ON SLOPES OF MORE THAN 4% AND LESS THAN 6%. ON SLOPES OF 6% OR MORE, THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.
 2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
 3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4' X 225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4' X 150' ROLL OF MATERIAL.
 4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
 5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	ROLLED EROSION CONTROL PRODUCT (RECP) DITCH
NOTES: REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).	
REVISIONS	
MARCH 8, 2007	JMF
APRIL 16, 2007	WHF
JANUARY 13, 2009	WHF



- CONSTRUCTION SPECIFICATIONS**
1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
 2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
 3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4' X 225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4' X 150' ROLL OF MATERIAL.
 4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
 5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE
NOTES: REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE. THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).	
REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF



- CONSTRUCTION SPECIFICATIONS**
1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
 2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAF1100X, STABILINKA T140N OR APPROVED EQUIVALENT.
 3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
 4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
 5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
 6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	SILT FENCE
NOTES: REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.	
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).	
REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF

REV. NO.	DATE:

RENAUD BROS. INC.
285 FT. BRIDGEMAN RD. VERNON VT. 05554
PH: (802) 251-7585 FAX: (802) 251-7508

SHEET NAME: EPSC DETAILS 1 BRIDGE 52	SHEET NO. 4 OF 8
PROJECT NAME: WINHALL	
PROJECT NO.: STP CULV (31)	
DRAWN BY: CE	CHK'D BY:
DATE: 04/16/2015	

VAOT RURAL AREA MIX					
	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
37.5%	22.5	45	CREEPING RED FESCUE	85%	98%
37.5%	22.5	45	TALL FESCUE	90%	95%
5.0%	3	6	RED TOP	90%	95%
15.0%	9	18	BIRDSFOOT TREFOIL	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	85%	95%
100%	60	120			

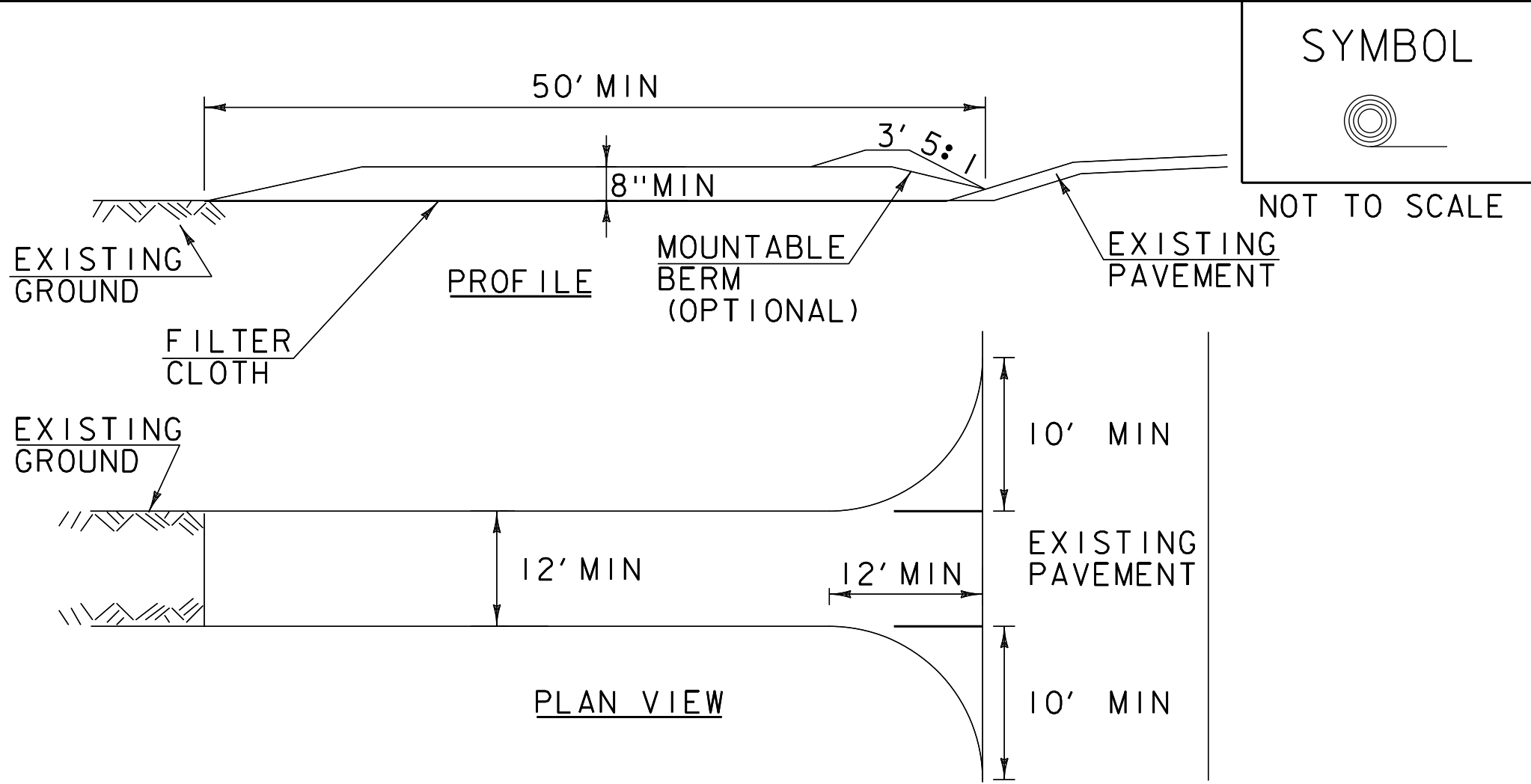
VAOT URBAN AREA MIX					
	LBS/AC				
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
42.5%	34	68	CREEPING RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

SOIL AMENDMENT GUIDANCE			
FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	FOLLOW	PELLETIZED	FOLLOW
500 LBS/AC	MANUFACTURER	2 TONS/AC	MANUFACTURER

CONSTRUCTION GUIDANCE

- 1.RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
- 2.URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
- 3.ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
- 4.FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER
- 5.HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE , ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
- 6.TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS , OR AS DIRECTED BY THE ENGINEER.
- 7.HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED
- 8.TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

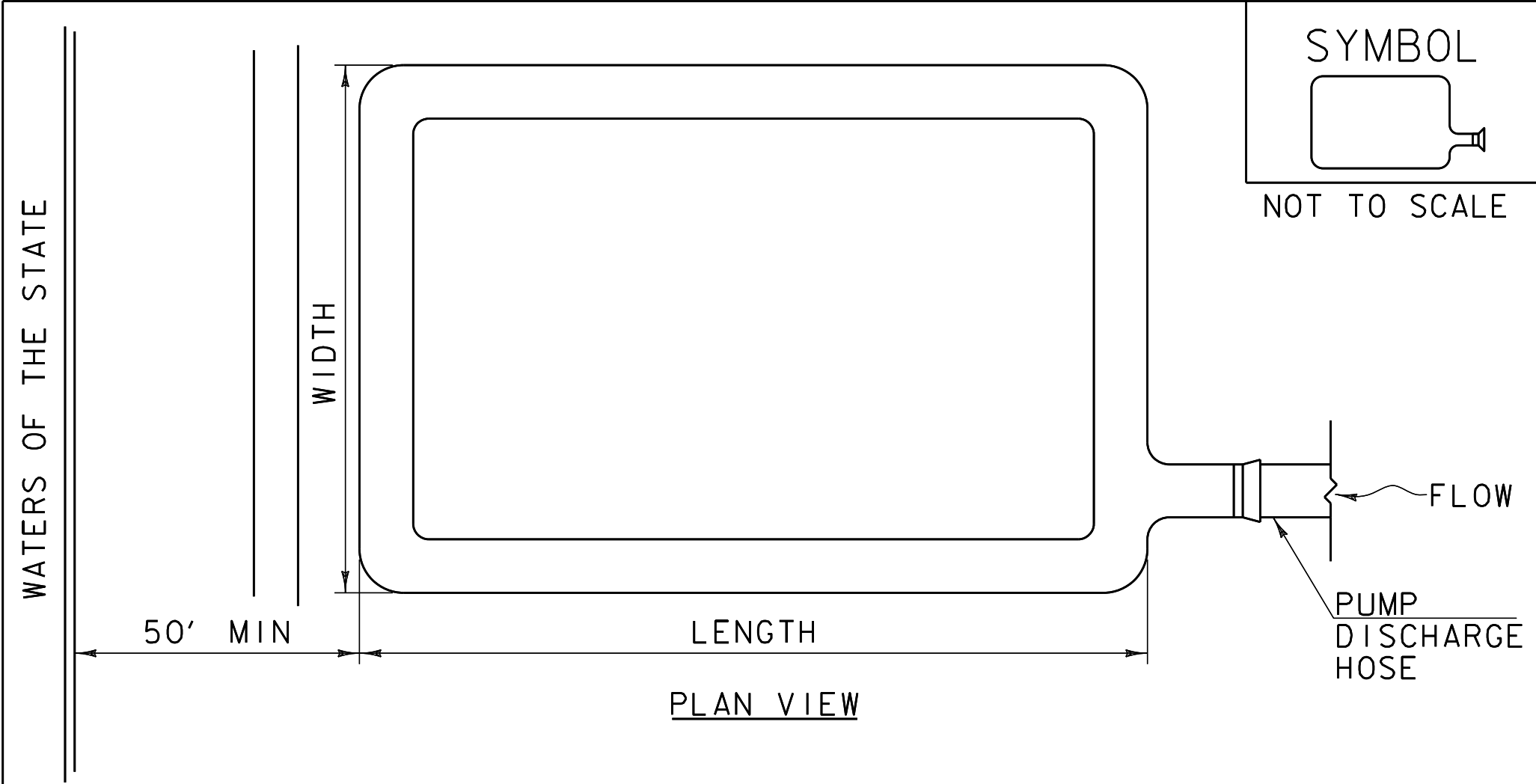
ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES	TURF ESTABLISHMENT
	REVISIONS
	JUNE 23, 2009 WHF
	JANUARY 15, 2010 WHF
	FEBRUARY 16, 2011 WHF



CONSTRUCTION SPECIFICATIONS

- 1.STONE SIZE- USE 1-4" STONE , RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- 2.LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
- 3.THICKNESS- NOT LESS THAN 8".
- 4.WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
- 5.GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
- 6.SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL , A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- 7.MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 8.WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 9.PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.


ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	STABILIZED CONSTRUCTION ENTRANCE
NOTES: REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.	REVISIONS
	MARCH 24, 2008 WHF
	JANUARY 13, 2009 WHF
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.	



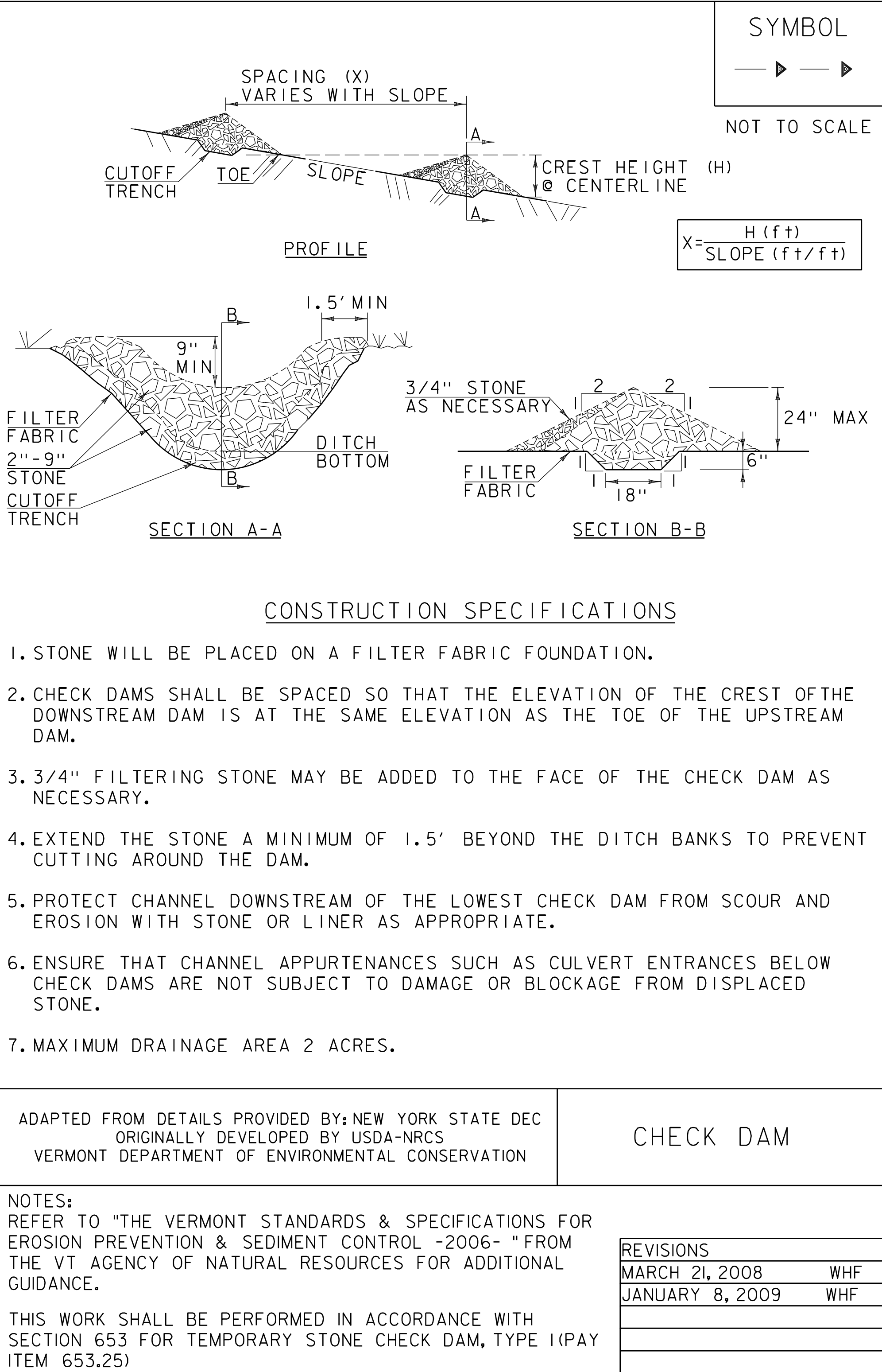
CONSTRUCTION SPECIFICATIONS

1. THE PRIMARY PURPOSE OF FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS.
2. FILTER BAGS SHALL BE INSTALLED ON A VEGETATED SLOPE GRADED TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.
3. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE , STONE , OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.
4. FILTER BAGS SHALL BE LOCATED A MINIMUM OF 50' FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.
6. A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.
7. FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE EPSC PLAN OR AS DIRECTED BY THE ENGINEER.


	FILTER BAG
NOTES: REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- "FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.	REVISIONS
	MARCH 24, 2008 WHF
	JANUARY 13, 2009 WHF
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR FILTER BAG (PAY ITEM 653.45) AND AS SPECIFIED IN THE CONTRACT.	

REV. NO.	DATE:		SHEET NAME:	EPSC DETAILS 2 BRIDGE 52	
			PROJECT NAME:	WINHALL	SHEET NO.
			PROJECT NO:	STP CULV (31)	5
			DRAWN BY:	CE	OF
			CHK'D BY:		8
			DATE:	04/16/2015	


285 FT. BRIDGEMAN RD. VERNON VT., 05554
PH: (802) 251-7383 FAX: (802) 251-7308




REV. NO.		DATE:		<div><div>R</div><div>RENAUD BROS. INC.</div><div>285 FT. BRIDGEMAN RD. VERNON VT., 05354 PH: (802) 251-7383 FAX: (802) 251-7308</div></div>	SHEET NAME: EPSC DETAILS 3 BRIDGE 52			
					PROJECT NAME: WINHALL			
					PROJECT NO: STP CULV (31)			
					SHEET NO. 6			
				DRAWN BY: CE		CHK'D BY:	DATE: 04/16/2015	OF 8



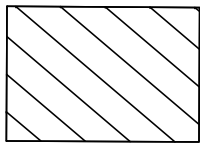
A square frame containing a 4x4 grid of 16 small circles, each touching its four neighbors.



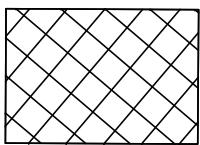
VT 11 & 30
TO MANCHESTER

REV. NO.		DATE:		 RENAUD BROS. INC. 283 FT. BRIDGEMAN RD. VERNON VT. 05554 PH: (802) 251-7383 FAX: (802) 251-7308	SHEET NAME: BRIDGE 52 PROJECT IMPACTS PLAN 1	
					PROJECT NAME: WINHALL	
					PROJECT NO: STP CULV (31)	
					DRAWN BY: CE	
					CHK'D BY:	DATE: 04/16/2015

WETLANDS BUFFER IMPACTS

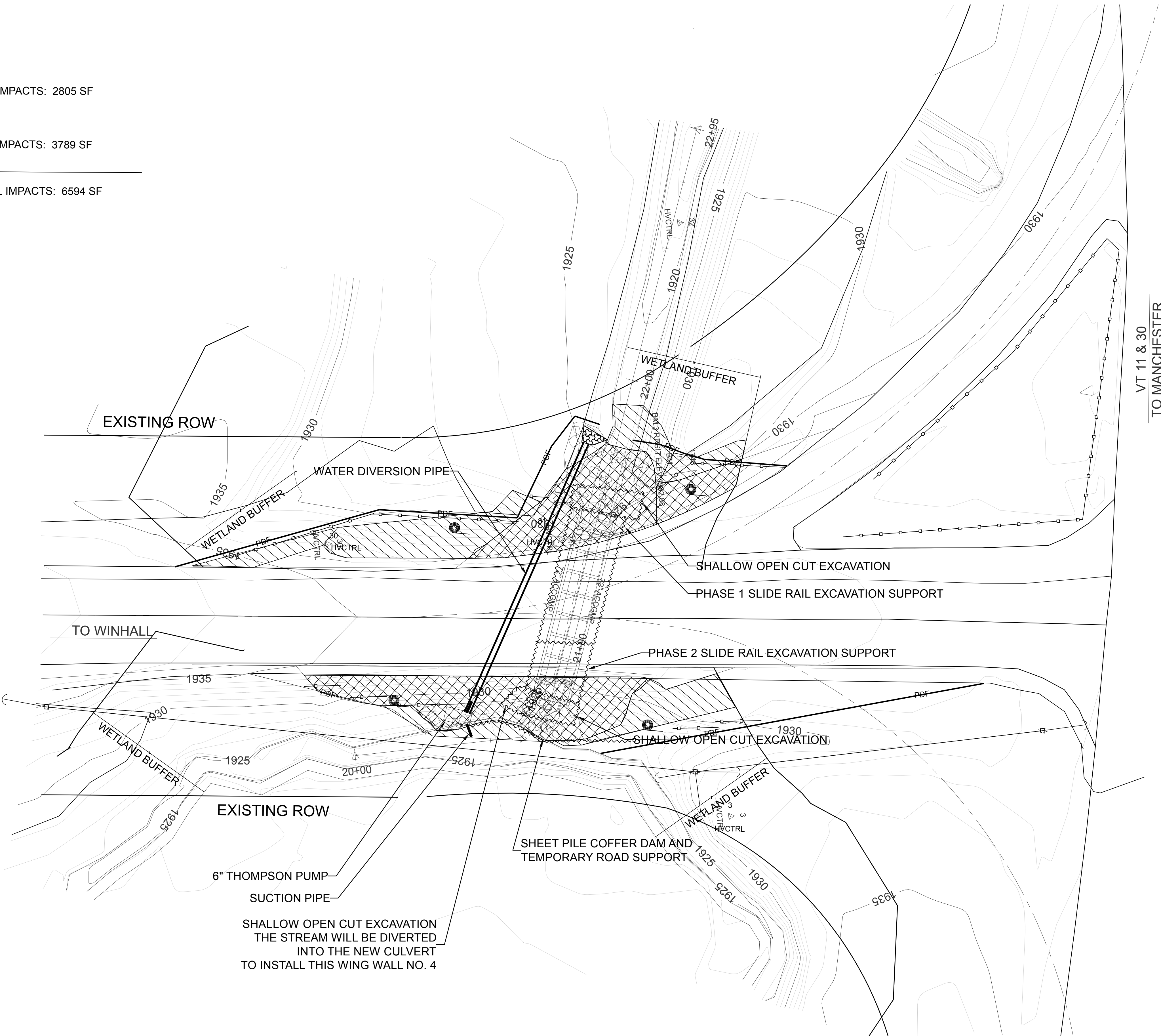


WETLANDS BUFFER SECONDARY IMPACTS: 2805 SF



WETLANDS BUFFER PERMANENT IMPACTS: 3789 SF

TOTAL IMPACTS: 6594 SF



BRIDGE 52 PROJECT IMPACTS PLAN 2
SCALE 1" = 20'-0"

REV. NO.	DATE:

RENAUD BROS. INC.
2835 FT. BRIDGEMAN RD. VERNON VT., 05554
PH. (802) 251-7583 FAX (802) 251-7508

SHEET NAME: BRIDGE 52 PROJECT IMPACTS PLAN 2		
PROJECT NAME: WINHALL	SHEET NO. 8 OF 8	
PROJECT NO: STP CULV (31)		
DRAWN BY: CE	CHK'D BY:	DATE: 04/16/2015